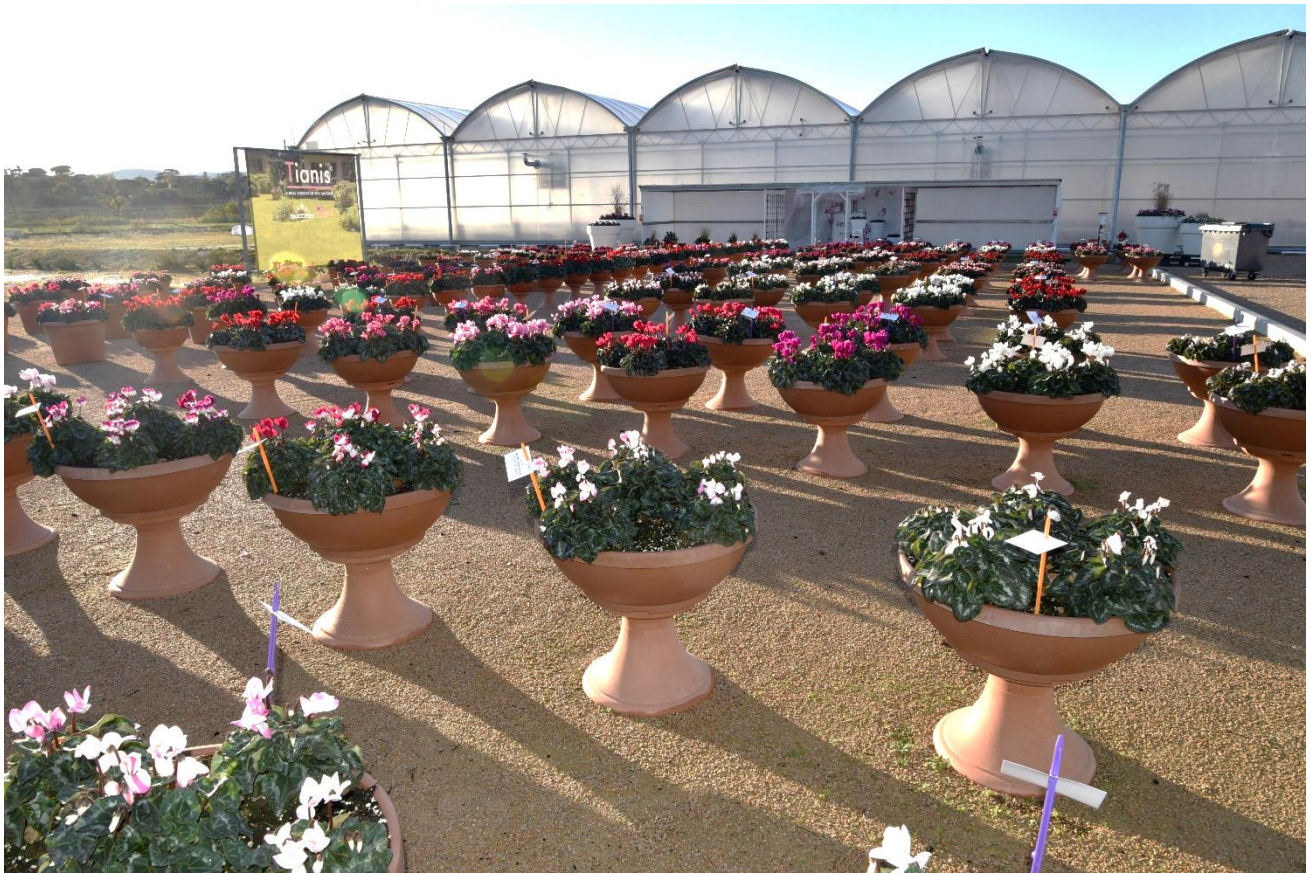


MOREL Outdoor trials 2021



Trial site, shot on 2021-12-10

Table of contents

I.	Introduction.....	3
II.	Technical data.....	3
	A. Culture conditions	3
	B. Trials protocols	3
	C. Identification and distribution of varieties tested.....	4
III.	Geographical and climatic conditions	6
	A. Trial location	6
	B. Climatic conditions	7
IV.	Evaluation of « Double containers » trial	10
	A. General results.....	10
	B. Evolutions over trial duration.....	10
	C. Rankings.....	11
V.	Evaluation of « Single containers » trial	12
	A. General results for Morel varieties.....	12
	B. Evolutions of Morel varieties over trial duration	12
VI.	Evaluation of « OUTstanding® containers » trial.....	13
	A. General results.....	13
	B. Evolutions over trial duration.....	13
	C. Rankings.....	14
VII.	OUTstanding® varieties	16
	A. Summary lists	16
	B. Weekly ratings and photographic benchmark of newly validated varieties	18
VIII.	Conclusion	22

I. Introduction

Outdoor trials are carried out every year in parallel with breeding trials. Their purpose is to assess the outdoor behavior in real conditions. They are an essential complement to the selection work to validate the performance of Morel varieties in beds and in the garden.

II. Technical data

A. Culture conditions

1. Material

- **Seeds:** Commercial and experimental varieties
- **Potting soil:** Klasmann
- **Fertilization:**
 - Orange stick : OSMOCOTE® Exact High K / 12-7-19 (3-4month) - 3kg/m³ + OSMOCOTE® CalMag - 500g/m³
 - Purple stick : OSMOCOTE® 5 / 16-8-12 (5-6month) - 3kg/m³ + OSMOCOTE® CalMag - 500g/m³
- **2 container sizes:** (Ø 62cm - 42.5L) & (Ø 60cm – 76.4L)

2. Planning

Trial	Pot diameter	Sowing	Potting	Planting in containers	Acclimatization (shaded area)	Final position	Evaluation
Double & Outstanding®	11 cm	W15	W27	W38	W38-W40	W40~	W42-W04
Single	13 cm	W14	W29				

B. Trials protocols

1. Data collection

- Number and quality of plants, leaves and flowers are evaluated by an operator every week. Then, plants are cleaned.
- Data related to meteorological and climatic conditions are obtained from measurements made at regular intervals, by an automatic weather station located on previous trial site.



Trial site, shot on 2021-12-10

2. Types of trials

- **Double containers: 46 varieties**
Tested varieties are planted in 2 containers facing each other, in order to compare at a glance 2 samples of the same variety exposed directly to rain, wind and sun light.
- **OUTstanding® containers: 60 varieties**
In order to provide a more relevant point of comparison, varieties already labeled OUTstanding Cyclamen® are also presented in a single container for each variety.
- **Single containers: 25 varieties**
Performances for outdoor uses of the most suitable Midi type varieties are compared to competitor's varieties in the same segment.

C. Identification and distribution of varieties tested

109 varieties tested, using 177 containers (with 28 experimental varieties, including 12 Pre-intro)

List of varieties used in each trial

	N°	Designation	Status	Double cont.	OUTstanding cont.	Single cont.	TOTAL
Smartiz®	6012	Bright red	CAT	X	X		19
	6013	Red	CAT	X	X		
	6070	Rose	CAT		X		
	6071	Deep rose	CAT		X		
	6084	Rose Bengal exp.	P-I	X			
	6090	Light purple	CAT	X	X		
	6095	Purple	CAT		X		
	6110	Bordeaux exp.	P-I	X			
	6121	Pure white evolution exp.	P-I	X			
	6221	Deep magenta silverleaf exp.	P-I	X			
	6385	FANTASIA® Deep magenta	CAT		X		
	6395	FANTASIA® Purple	CAT	X			
	6701	VICTORIA	CAT	X			
	6999	Rose shades exp.	EXP	X			
	6999	Persian rose exp.	EXP	X			
	6999	Rose flame exp.	EXP	X			
	6999	Purple exp.	EXP	X			
	6999	Magenta exp.	EXP	X			
	69290	BISOUS® mix	CAT	X			
Metis®	4011	Scarlet compact	CAT	X	X		32
	4013	Bright red compact	CAT	X	X		
	4062	Light pink with eye	CAT		X		
	4072	Rose shades	CAT		X		
	4073	Deep rose	CAT		X		
	4080	Rose Aquarel	CAT	X	X		
	4092	Bright purple	CAT	X	X		
	4096	Purple	CAT	X	X		
	4122	Pure white 2 exp.	P-I	X			
	4210	Scarlet red silverleaf	CAT		X		
	4221	Deep magenta silverleaf	CAT		X		
	4230	Salmon shades silverleaf	CAT		X		
	4270	Deep rose silverleaf	CAT		X		
	4290	Light purple silverleaf	CAT		X		
	4311	FANTASIA® ARTIC Red	CAT		X		
	4315	FANTASIA® Red & Deep rose	CAT		X		
	4320	FANTASIA® Scarlet salmon	CAT		X		
	4385	FANTASIA® Deep magenta	CAT		X		
	4395	FANTASIA® Purple	CAT		X		
	4701	VICTORIA	CAT	X	X		
	4702	ABSOLU® de Morel exp.	P-I	X	X		
	4791	VICTORIA Deco Mix	CAT		X		
	4795	ORIGAMI® silverleaf	CAT	X	X		
	4911	Edge mix	CAT	X			
	4995	FANTASIA® Deep rose Winter exp.	EXP	X			
	4995	FANTASIA® Purple Winter exp.	EXP	X			
	4999	Red exp.	EXP	X			
	4999	Salmon with edge exp.	EXP		X		
	4999	Light purple with edge exp.	EXP		X		
	4999	Magenta with edge exp.	EXP		X		
	44705	LILIBELLE® Magenta	CAT		X		
	44790	LILIBELLE® Bright purple	CAT		X		

Tianis®	3010	Bright red	CAT	X	X		17
	3012	Scarlet red	CAT		X		
	3035	Deep salmon	CAT		X		
	3040	Salmon with eye	CAT		X		
	3070	Rose	CAT		X		
	3071	Deep rose	CAT		X		
	3095	Purple	CAT		X		
	3107	Deep magenta	CAT		X		
	3121	Pure white evolution exp.	P-I	X			
	3129	White	CAT	X	X		
	3170	Rose flame exp.	P-I	X			
	3311	FANTASIA® Red	CAT		X		
	3371	FANTASIA® Deep rose	CAT		X		
	3372	FANTASIA® Rose	CAT		X		
	3386	FANTASIA® Deep magenta	CAT		X		
	3396	FANTASIA® Purple	CAT		X		
	3999	White exp.	EXP	X			
Midi+®	5011	Bright red	CAT	X	X	X	18
	5041	Salmon with eye	CAT	X	X		
	5060	Rose with eye	CAT	X			
	5071	Deep rose	CAT	X	X		
	5092	Bright purple	CAT	X		X	
	5095	Purple	CAT		X		
	5110	Bordeaux	CAT		X		
	5124	Pure white	CAT	X		X	
	5126	White compact	CAT	X		X	
	5999	White exp.	EXP	X			
	52228	METALIS® White	CAT		X		
	53030	INDIAKA® Salmon	CAT		X		
	53070	INDIAKA® Rose	CAT		X		
	53080	INDIAKA® Light rose exp.	P-I	X			
	53090	INDIAKA® Bright purple	CAT		X		
	53105	INDIAKA® Magenta	CAT		X		
	53995	INDIAKA® Magenta exp.	EXP	X			
	53995	INDIAKA® Bright purple exp.	EXP	X			
Latinia®	1010	Scarlet red	CAT			X	5
	1011	SUCCESS® Bright red	CAT		X	X	
	1062	SUCCESS® Light pink with eye	CAT	X			
	1107	SUCCESS® Deep magenta	CAT		X		
	1995	FANTASIA® Deep rose exp.	EXP	X		X	
Halios®	2010	Scarlet red	CAT			X	10
	2011	Red REBELLE®	CAT			X	
	2012	Scarlet red evolution	CAT			X	
	2015	Bright scarlet	CAT			X	
	2016	HD Red REBELLE®	CAT			X	
	2018	HD Bright scarlet	CAT			X	
	2103	HD Lavender exp.	P-I			X	
	2211	Red silverleaf evolution	CAT			X	
	2306	FANTASIA® Magenta evolution exp.	P-I			X	
	2397	FANTASIA® Purple evolution exp.	P-I			X	
Competitors		Schoneveld - Allure Red	CON			X	8
		Schoneveld - Allure White	CON			X	
		Syngenta - Laser Synchro Red	CON			X	
		Syngenta - Laser Synchro White	CON			X	
		Schoneveld - XL Red	CON			X	
		Schoneveld - XL Pur White	CON			X	
		Syngenta - Sierra Synchro Red	CON			X	
		Syngenta - Sierra Synchro White	CON			X	
TOTAL				46	60	25	

III. Geographical and climatic conditions

A. Trial location

1. City of Fréjus (France)



2. Trial site

- GPS coordinates:
43°27'12.9"N 6°44'09.4"E
- Trial site extend over an outdoor area of more than 1600m² for containers and 200m² for the beds.



Trial site on 2020-05-04
(Geoportail : <https://www.geoportail.gouv.fr/carte>)

Trial site, shot on 2022-01-13



B. Climatic conditions

1. General information

a) Climate

Fréjus is located on the Côte d'Azur and enjoys a Mediterranean climate with hot, dry summers and mild, wet winters. The mistral sometimes blows, although the town is sheltered by the two coastal mountain range of "Massif des Maures" and "Massif de l'Esterel".

	Sept	Oct	Nov	Dec	Jan	Feb	Total
Average temperature (°C)	20	17	12	9	8	9	
Average of Min / Max (°C)	15 / 26	12 / 21	7 / 18	4 / 14	3 / 13	3 / 14	
Precipitation (mm)	75	120	100	95	71	42	501
Sunshine duration (h)	234	172	142	121	156	167	991

Source: Météo France station at Fréjus from 1981 to 2010

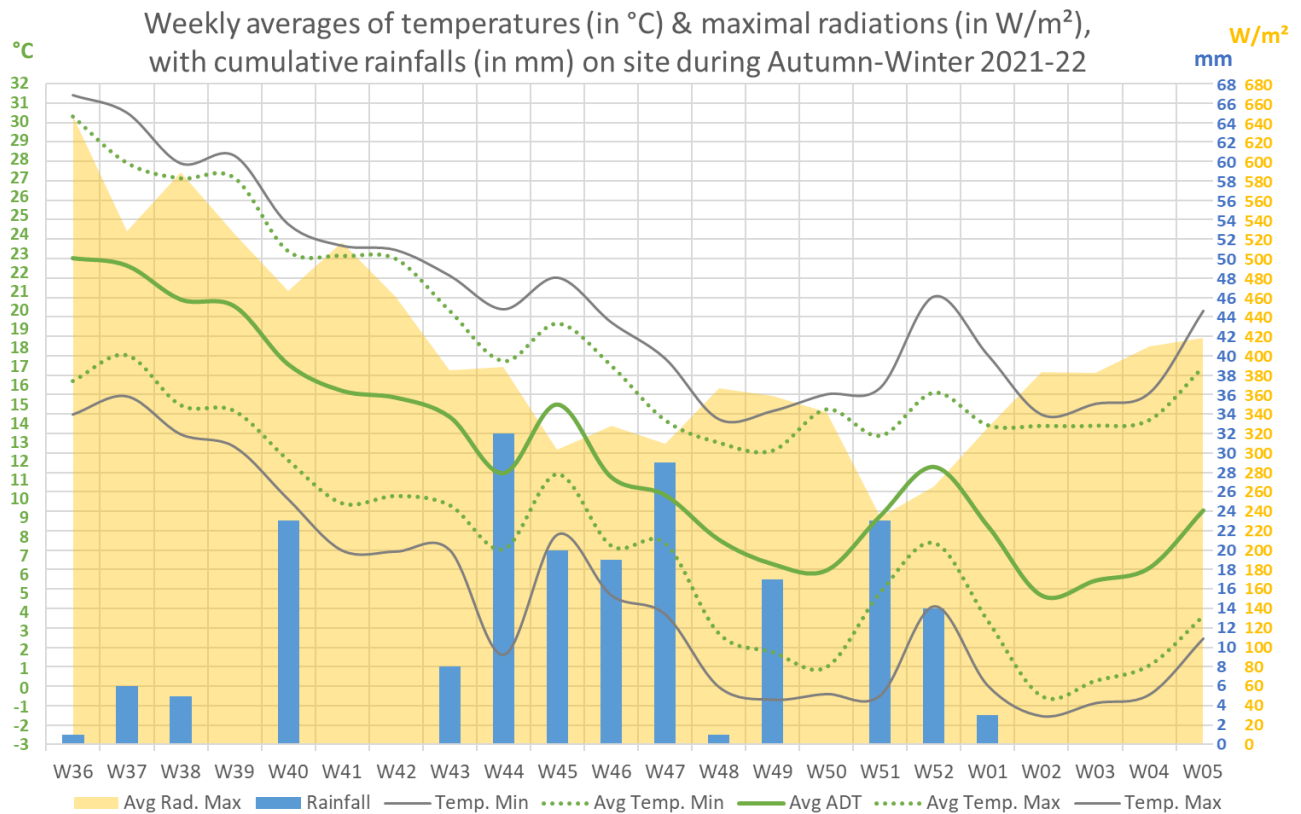
b) Comparison with European cities

For comparison, below are the averages of temperatures and rainfalls of some major cities in Europe. Contrary to popular belief, cyclamen planted in the Mediterranean regions are exposed to greater rainfall accumulations than in many regions of northern Europe.

		Sept	Oct	Nov	Dec	Jan	Feb	Total
Nice	Average temperature (°C)	24	21	16	14	13	13	
	Number of rainy days (d)	4	7	7	6	6	6	36
	Precipitation (mm)	76	144	94	88	85	60	547
	Sunshine duration (h)	239	205	156	151	150	152	1053
Paris	Average temperature (°C)	21	16	10	8	7	8	
	Number of rainy days (d)	8	10	10	11	10	9	58
	Precipitation (mm)	55	60	52	59	54	44	324
	Sunshine duration (h)	172	126	75	51	56	88	568
Amsterdam	Average temperature (°C)	18	14	9	7	5	6	
	Number of rainy days (d)	16	17	19	18	17	13	100
	Precipitation (mm)	82	85	89	75	62	43	436
	Sunshine duration (h)	139	109	62	51	63	88	512
London	Average temperature (°C)	20	16	11	8	8	9	
	Number of rainy days (d)	9	11	11	10	11	8	60
	Precipitation (mm)	51	61	58	48	42	36	296
	Sunshine duration (h)	148	110	69	48	52	71	498
Berlin	Average temperature (°C)	19	13	7	4	3	4	
	Number of rainy days (d)	8	8	10	11	10	8	55
	Precipitation (mm)	45	37	44	55	42	33	256
	Sunshine duration (h)	156	111	52	37	45	72	473
Barcelona	Average temperature (°C)	26	22	17	14	14	14	
	Number of rainy days (d)	6	8	7	6	5	5	37
	Precipitation (mm)	81	91	59	40	38	37	346
	Sunshine duration (h)	207	181	145	143	146	156	978

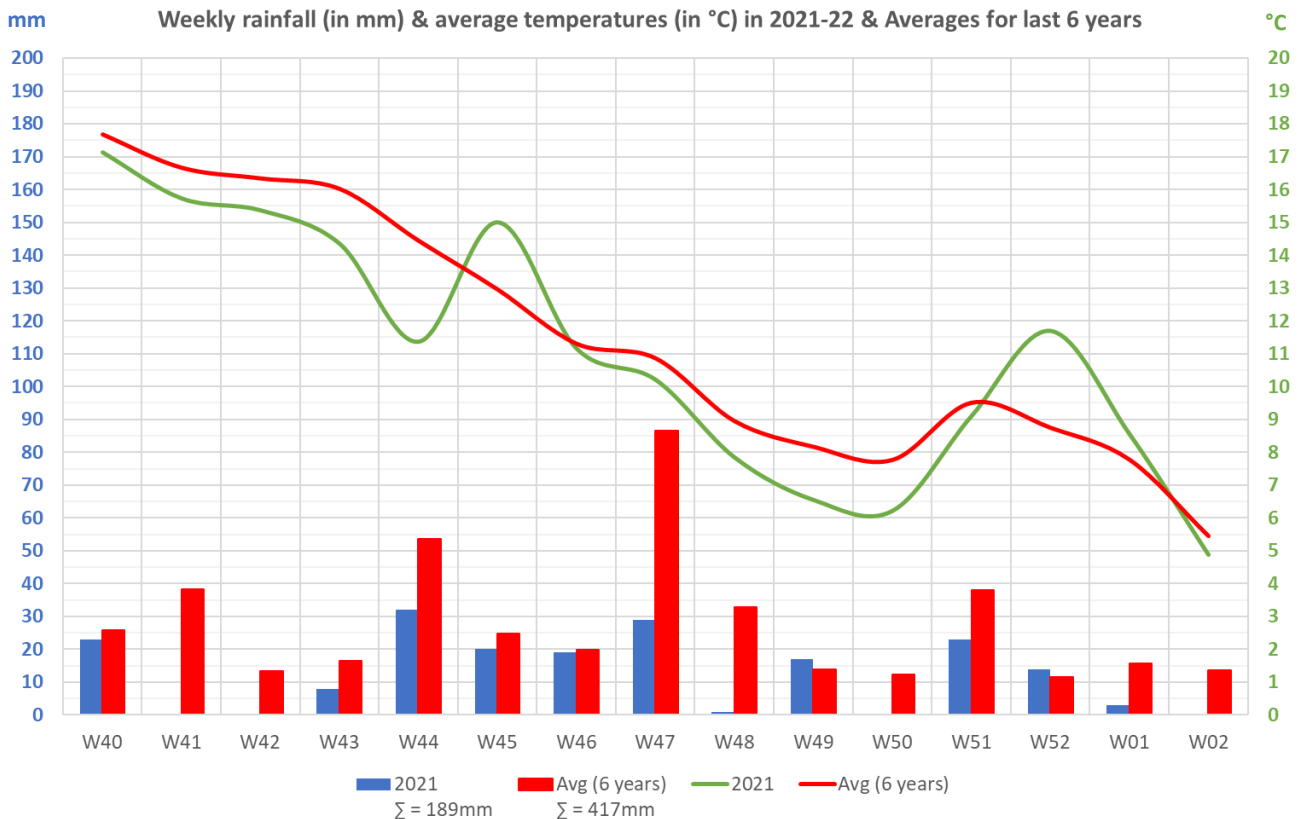
Source: World Meteorological Organization

2. Weekly temperatures, radiations and rainfalls on site during Autumn-Winter 2021-22



3. Comparison with previous years

a) Chart with averages temperatures & cumulative rainfalls



b) Table of weekly comparison on 6 years of meteorological data collected on site

		W40	W41	W42	W43	W44	W45	W46	W47	W48	W49	W50	W51	W52	W01	W02	Trial
2021	Rainfall	23	0	0	8	32	20	19	29	1	17	0	23	14	3	0	189
	Temp. Min	10,0	7,3	7,2	7,3	1,8	8,1	4,9	3,9	0,1	-0,6	-0,3	-0,4	4,3	0,1	-1,5	
	Avg Temp. Min	12,1	9,8	10,2	9,7	7,3	11,3	7,5	7,7	2,9	1,9	1,1	5,0	7,7	3,5	-0,5	
	Avg ADT	17,1	15,7	15,4	14,3	11,4	15,0	11,2	10,2	7,9	6,6	6,2	9,1	11,7	8,6	4,9	
	Avg Temp. Max	23,1	22,9	22,7	20,0	17,3	19,3	17,1	14,2	13,0	12,6	14,8	13,4	15,6	13,9	13,9	
	Temp. Max	24,5	23,4	23,2	21,8	20,0	21,7	19,4	17,4	14,2	14,7	15,5	15,9	20,7	17,6	14,5	
	Avg Rad. Max	466	517	460	385	389	303	328	309	366	358	342	234	265	326	383	
2020	Rainfall	48	9	6	9	23	20	1	2	0	43	0	53	8	90	28	342
	Temp. Min	9,5	9,5	5,9	7,6	7,0	8,2	8,3	1,6	2,1	0,3	-0,2	2,9	-2,0	-0,9	-1,7	
	Avg Temp. Min	11,8	10,6	7,4	12,1	10,2	10,8	9,7	4,9	5,5	3,4	2,2	7,4	4,5	4,0	0,9	
	Avg ADT	16,0	15,9	12,8	16,0	14,6	14,9	13,7	10,4	10,9	6,5	6,2	10,9	8,4	6,6	4,3	
	Avg Temp. Max	22,0	21,9	19,7	20,9	19,7	20,3	20,2	18,5	16,8	11,1	11,0	14,0	13,0	9,3	9,1	
	Temp. Max	24,4	24,7	21,2	23,3	21,7	22,5	21,2	20,7	19,3	12,8	14,1	15,7	15,5	12,0	10,0	
	Avg Rad. Max	556	602	626	521	475	409	484	459	398	313	319	175	382	293	335	
2019	Rainfall	4	0	47	60	27	8	91	283	172	3	6	73	0	0	2	776
	Temp. Min	9,0	8,1	11,6	10,8	10,8	4,2	2,9	0,3	4,5	2,9	1,5	8,7	1,7	0,2	-0,5	
	Temp. Max	31,0	27,0	25,0	25,6	23,5	22,5	17,6	14,8	18,6	19,4	18,5	17,9	20,3	17,0	17,1	
	Avg Temp.	19,1	17,3	18,7	18,5	16,6	11,8	9,2	10,1	12,2	10,1	9,7	14,1	9,7	6,6	6,1	
2018	Rainfall	70	163	8	20	172	84	5	66	13	0	5	59	0	0	0	666
	Temp. Min	7,1	11,6	11,9	9,4	6,0	9,7	4,5	2,1	1,9	5,2	1,4	2,7	1,4	-0,9	-3,4	
	Temp. Max	26,9	25,0	26,6	24,9	22,0	22,0	21,0	16,2	17,2	20,8	16,5	19,1	21,5	16,0	15,6	
	Avg Temp.	17,7	19,0	19,2	16,5	15,2	16,0	14,4	10,5	8,7	12,5	7,7	9,7	8,1	5,5	3,3	
2017	Rainfall	4	0	0	0	31	16	0	0	10	19	59	2	47	1	47	233
	Temp. Min	8,5	10,2	10,3	6,1	6,1	4,0	1,6	2,2	0,2	-2,2	-0,9	-0,3	-0,7	6,7	1,2	
	Temp. Max	29,4	23,2	27,2	24,8	22,2	22,3	19,9	17,8	15,0	15,0	14,9	15,7	16,7	20,3	16,4	
	Avg Temp.	19,1	16,8	17,4	14,3	14,5	10,6	8,5	10,0	6,1	5,4	8,2	4,4	7,9	14,0	8,5	
2016	Rainfall	6	58	19	2	38	1	2	139	1	0	3	19	1	0	5	294
	Temp. Min	8,5	7,3	6,8	7,9	7,2	2,4	3,8	5,4	0,3	0,1	0,7	2,1	-0,1	-1,2	-1,4	
	Temp. Max	26,5	22,1	22,6	23,9	22,9	17,2	19,9	18,8	17,3	17,4	16,8	17,7	17,0	14,5	14,0	
	Avg Temp.	17,1	15,4	14,6	16,5	14,5	9,4	11,0	13,9	8,1	7,9	8,5	8,9	6,7	5,4	5,6	

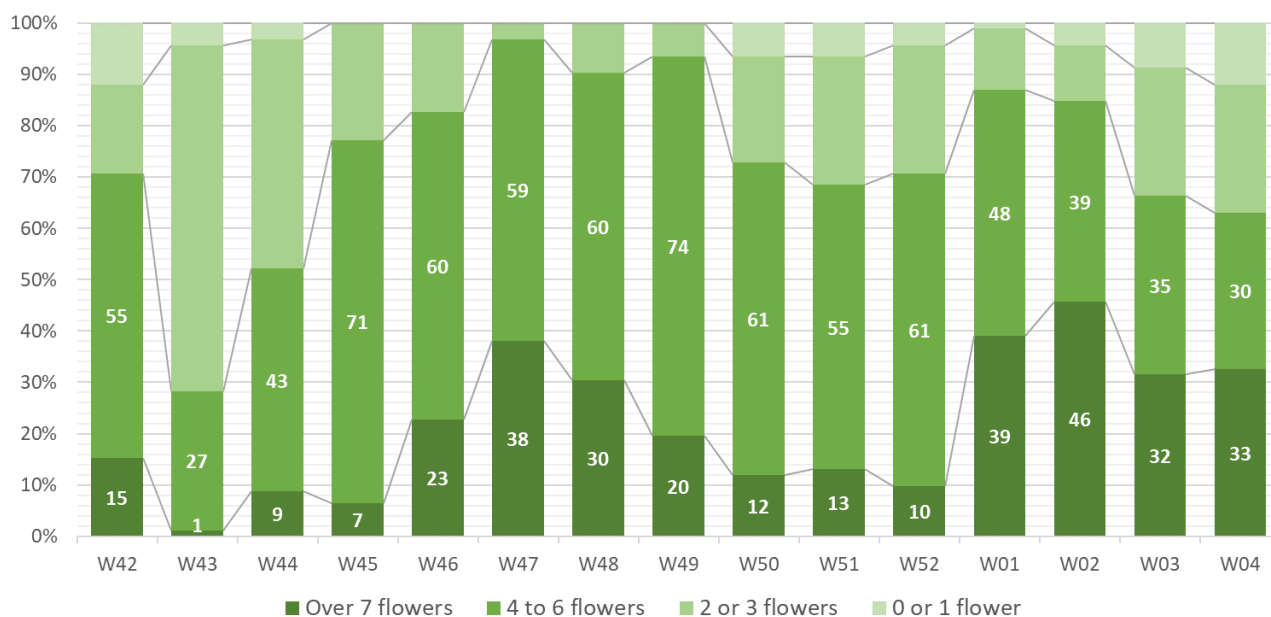
IV. Evaluation of « Double containers » trial

A. General results

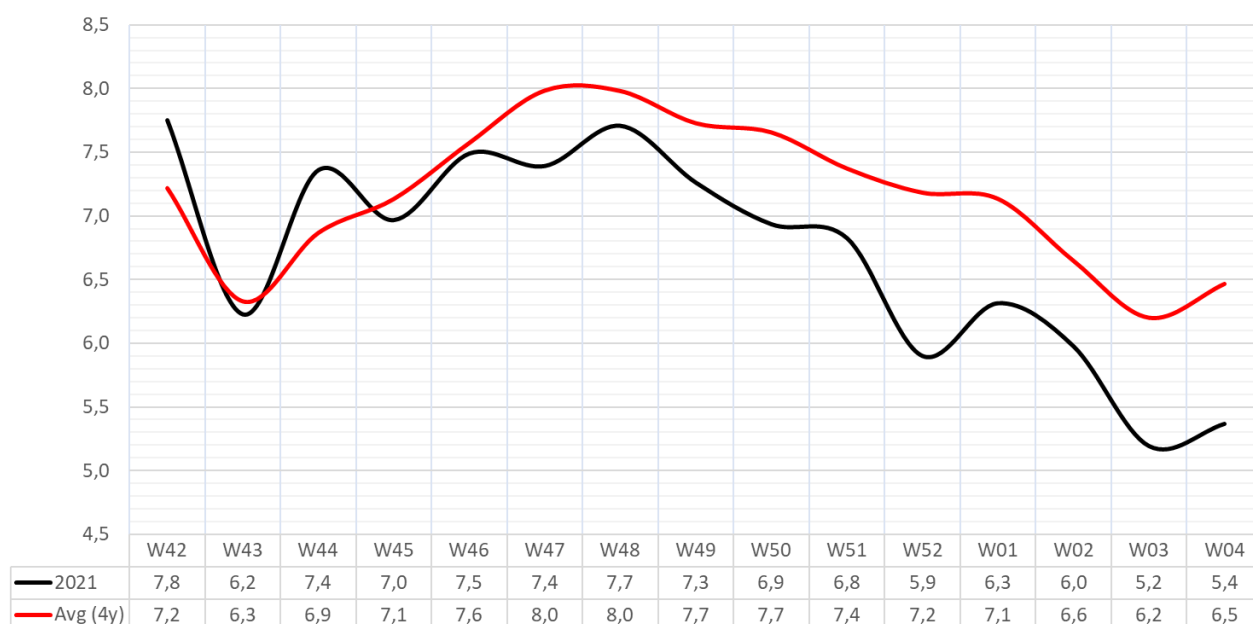
	2021	2020	2019	2018
Number of varieties tested	46	43	40	39
Number of validated varieties	21	30	32	30
Validation rate	46%	70%	80%	77%
Range of values	4,5 to 8,2	5,9 to 8,7	5,5 to 9,0	5,3 to 9,2
Average	6,7	7,3	7,6	7,5

B. Evolutions over trial duration

1. Weekly proportion of containers according to flower number per plant



2. Evolution & comparison of average ratings per week

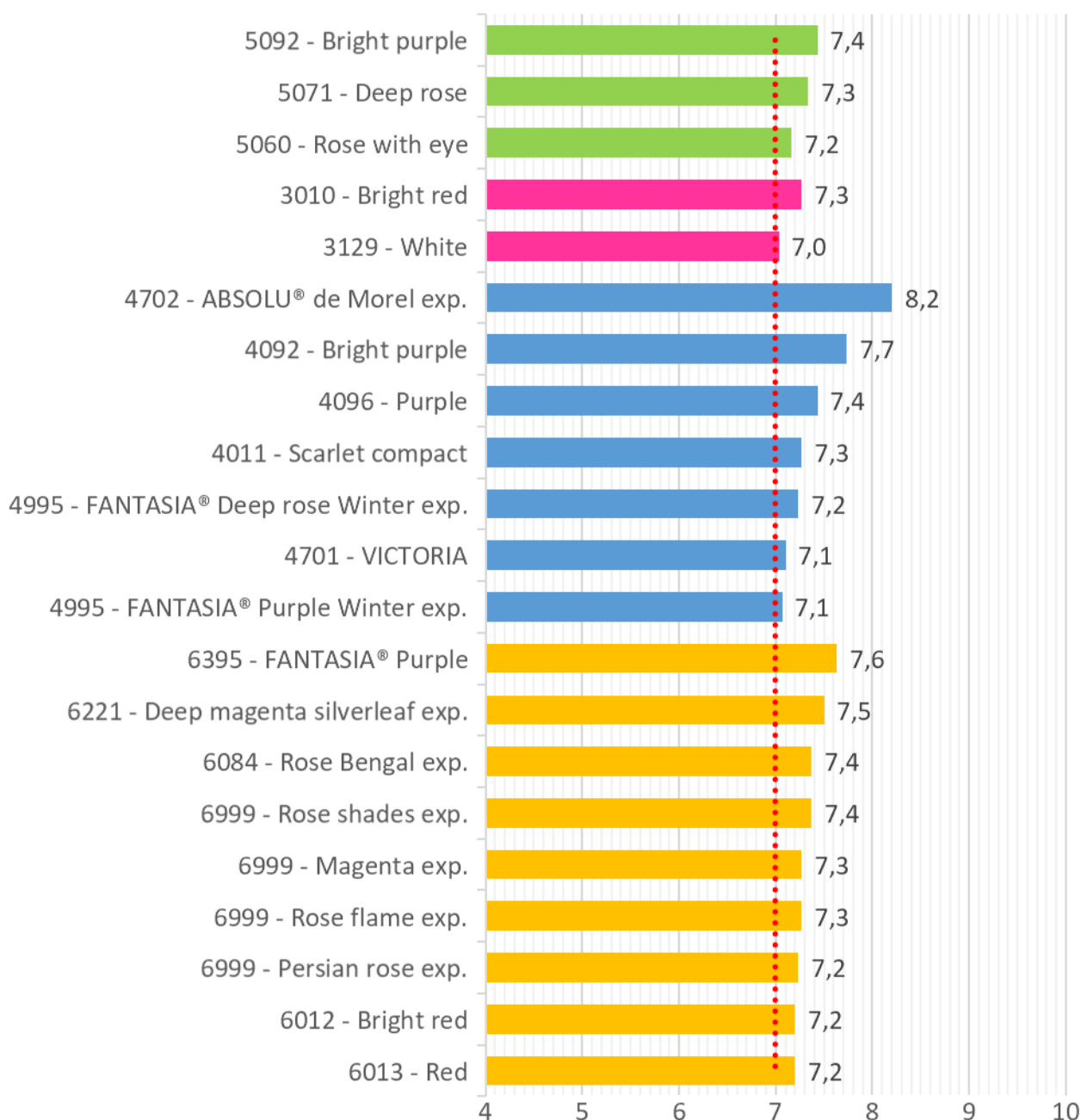


C. Rankings

1. Ranking of experimental varieties tested

1	4702 - Metis® ABSOLU® de Morel exp.	8,2
2	6221 - Smartiz® Deep magenta silverleaf exp.	7,5
3	6084 - Smartiz® Rose Bengal exp.	7,4
4	6999 - Smartiz® Rose shades exp.	7,4
5	6999 - Smartiz® Magenta exp.	7,3
6	6999 - Smartiz® Rose flame exp.	7,3
7	4995 - Metis® FANTASIA® Deep rose Winter exp.	7,2
8	6999 - Smartiz® Persian rose exp.	7,2
9	4995 - Metis® FANTASIA® Purple Winter exp.	7,1

2. Average ratings with varieties ordered by ranges & performances



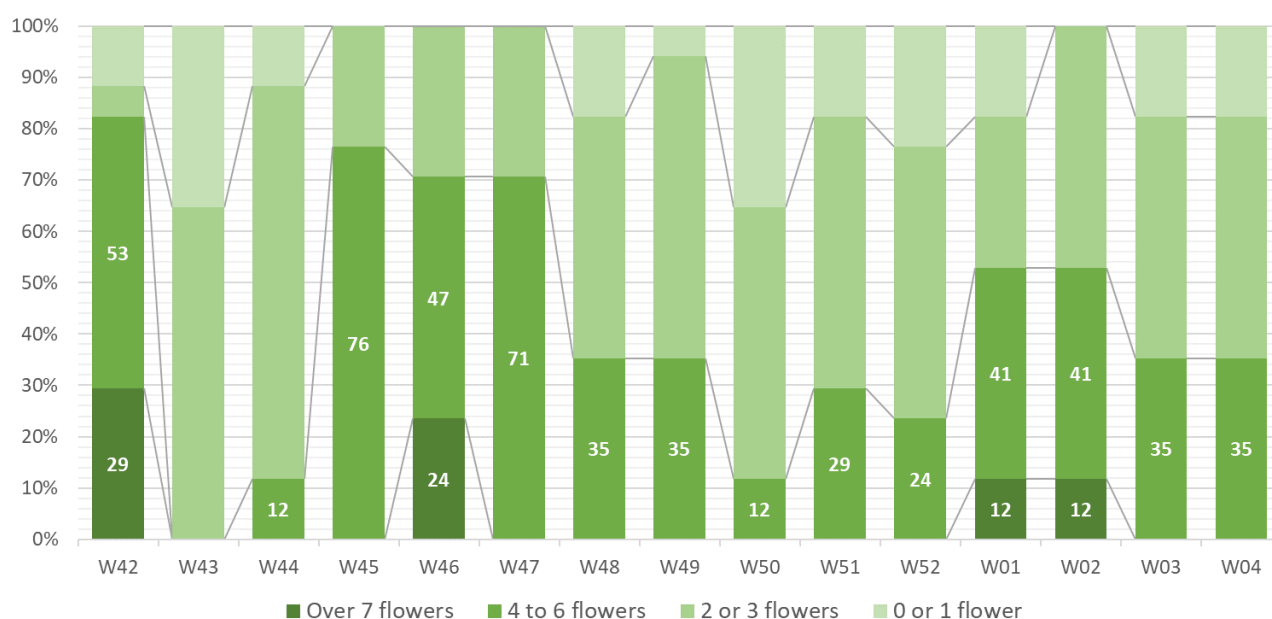
V. Evaluation of « Single containers » trial

A. General results for Morel varieties

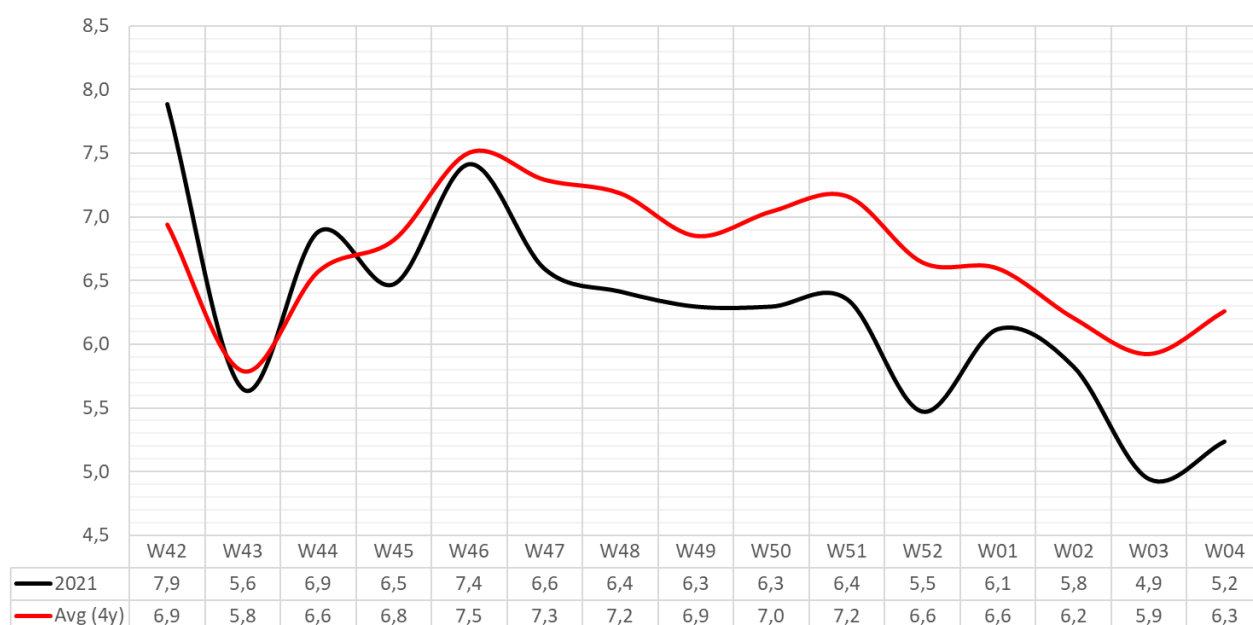
	2021	2020	2019	2018
Number of varieties tested	17	14	14	11
Number of validated varieties	3	5	9	8
Validation rate	18%	36%	64%	73%
Range of values	4,6 to 7,7	5,3 to 7,8	5,8 to 7,8	6,2 to 8,6
Average	6,3	6,6	7,1	7,4

B. Evolutions of Morel varieties over trial duration

1. Weekly proportion of containers according to flower number per plant



2. Evolution & comparison of average ratings per week



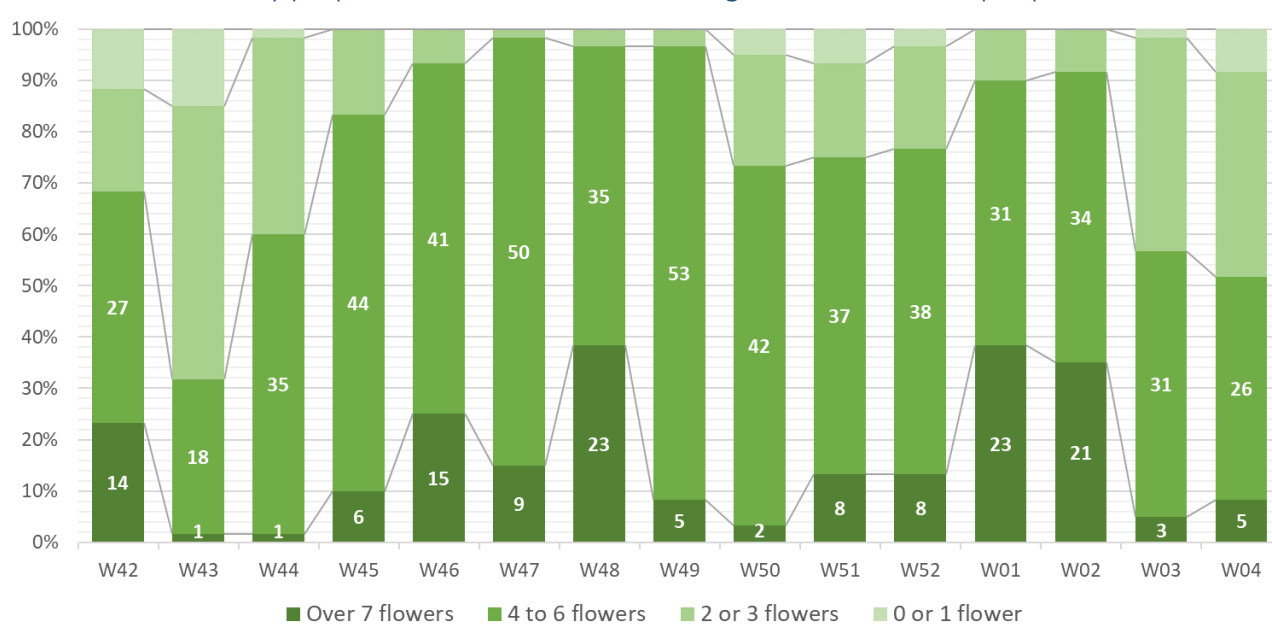
VI. Evaluation of « OUTstanding® containers » trial

A. General results

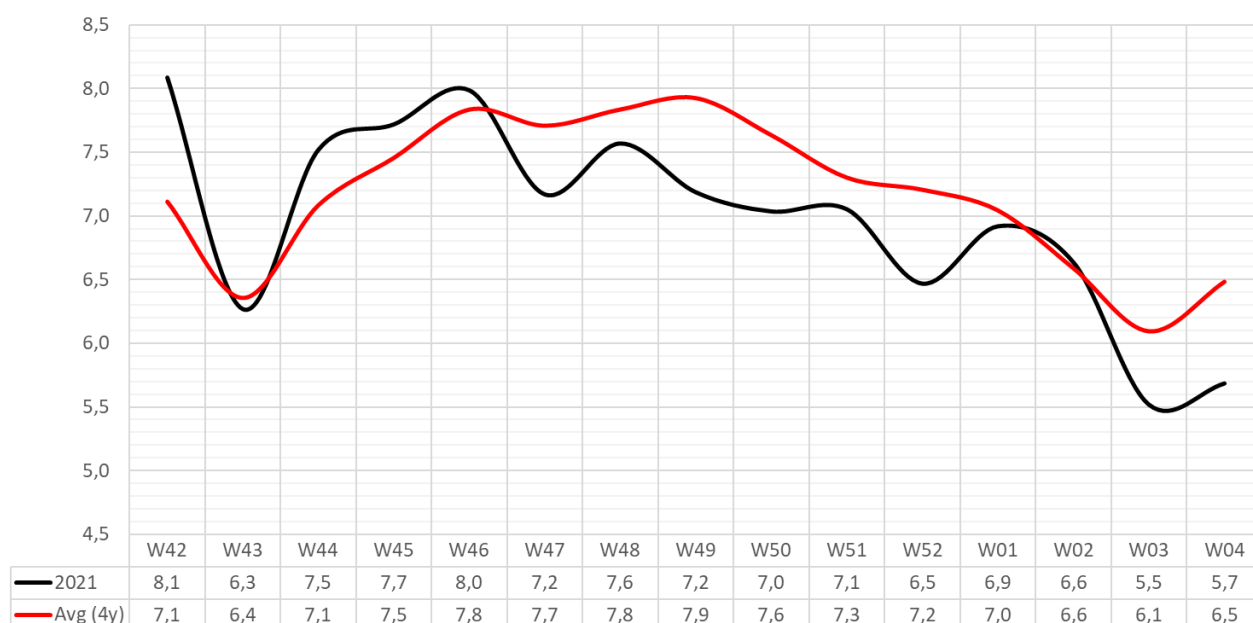
	2021	2020	2019	2018
Number of varieties tested	60	65	56	39
Number of validated varieties	35	50	47	37
Validation rate	58%	77%	84%	95%
Range of values	4,1 to 8,3	5,9 to 8,9	6,0 to 8,8	6,7 to 9,5
Average	7,0	7,5	7,6	7,9

B. Evolutions over trial duration

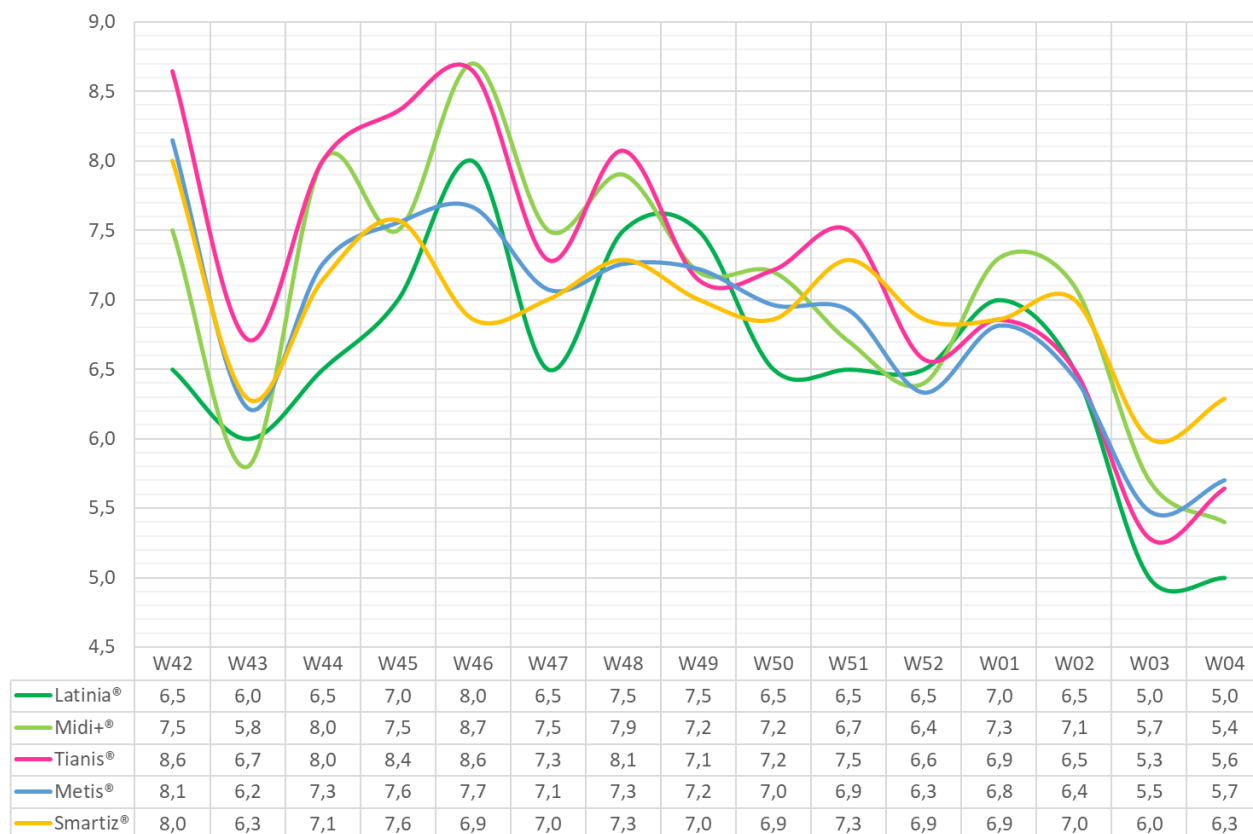
1. Weekly proportion of containers according to flower number per plant



2. Evolution & comparison of average ratings per week



3. Weekly average rating evolution for each range during trial

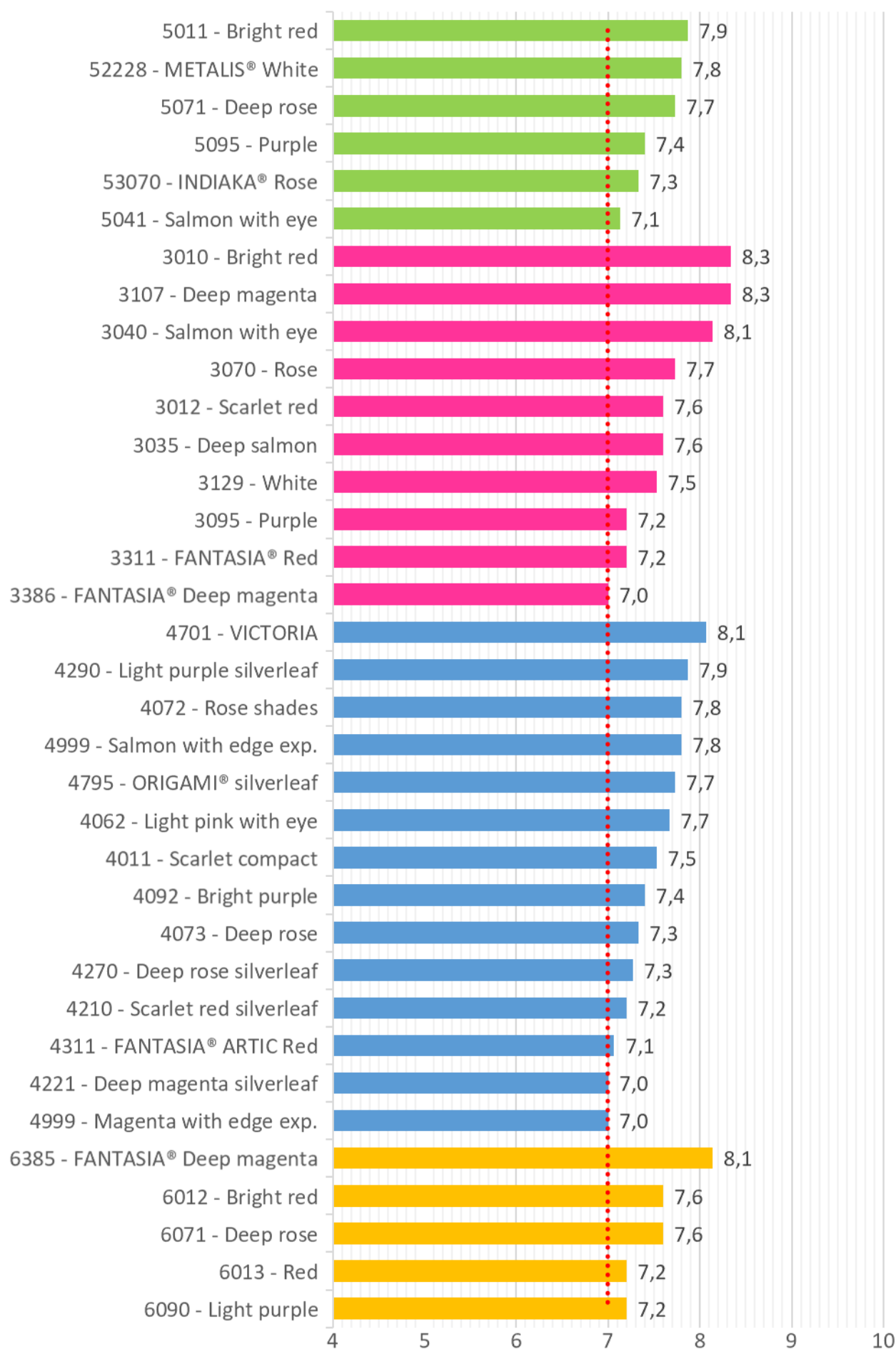


C. Rankings

1. TOP 10 of varieties tested already on catalog

1	3010 - Tianis® Bright red	8,3
2	3107 - Tianis® Deep magenta	8,3
3	3040 - Tianis® Salmon with eye	8,1
4	6385 - Smartiz® FANTASIA® Deep magenta	8,1
5	4701 - Metis® VICTORIA	8,1
6	5011 - Midi+® Bright red	7,9
7	4290 - Metis® Light purple silverleaf	7,9
8	52228 - Midi+® METALIS® White	7,8
9	4072 - Metis® Rose shades	7,8
10	3070 - Tianis® Rose	7,7
10	5071 - Midi+® Deep rose	7,7
10	4062 - Metis® Light pink with eye	7,7

2. Average ratings with varieties ordered by ranges & performances



VII. OUTstanding® varieties

A. Summary lists

1. List of 64 OUTstanding® varieties on catalog

9 Smartiz®	
6310	FANTASIA® Red
6385	FANTASIA® Deep magenta
6395	FANTASIA® Purple
6012	Bright red
6013	Red
6070	Rose
6071	Deep rose
6090	Light purple
6095	Purple

23 Metis®	
4311	FANTASIA® ARTIC Red
4315	FANTASIA® Red & Deep rose
4320	FANTASIA® Scarlet salmon
4385	FANTASIA® Deep magenta
4395	FANTASIA® Purple
4960	FANTASIA® mix
4011	Scarlet compact
4013	Bright red compact
4062	Light pink with eye
4072	Rose shades
4073	Deep rose evolution
4080	Rose Aquarel
4092	Bright purple
4096	Purple
4210	Scarlet red silverleaf
4221	Deep magenta silverleaf
4230	Salmon shades silverleaf
4270	Deep rose silverleaf
4290	Light purple silverleaf
4950	Silverleaf mix
4701	VICTORIA
4791	VICTORIA Deco Mix
4961	FANTASIA® Winter mix
4795	ORIGAMI® Silverleaf

15 Tianis®	
3311	FANTASIA® Red
3371	FANTASIA® Deep rose
3386	FANTASIA® Deep magenta evolution
3396	FANTASIA® Purple evolution
3960	FANTASIA® mix
3970	SUCCESS® mix
3010	Bright red
3012	Scarlet red
3035	Deep salmon
3040	Salmon with eye
3070	Rose
3071	Deep rose
3095	Purple
3107	Deep magenta
3129	White evolution

13 Midi+®	
5011	Bright red
5041	Salmon with eye
5060	Rose with eye
5071	Deep rose
5092	Bright purple
5095	Purple
5110	Bordeaux
53030	INDIAKA® Salmon
53070	INDIAKA® Rose
53090	INDIAKA® Bright purple
53105	INDIAKA® Magenta
53950	INDIAKA® mix
52228	METALIS® White

3 Latinia®	
1011	SUCCESS® Bright red
1107	SUCCESS® Deep magenta
1010	Scarlet red

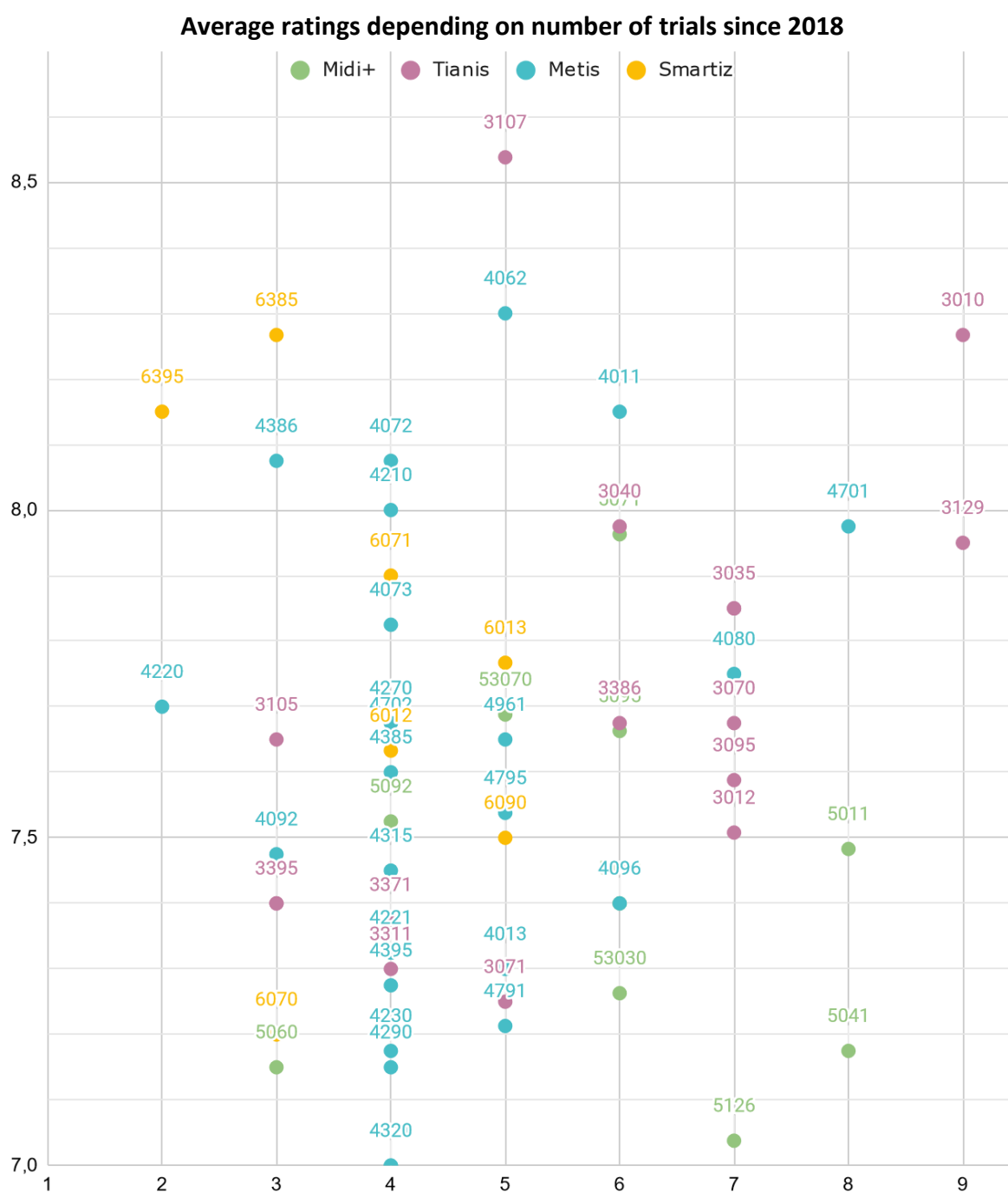
2. List of varieties validated, based on results of “Double containers” trial

	2021	2020
6084 - Smartiz® Rose Bengal exp.	7,4	-
4702 - Metis® ABSOLU® de Morel exp.	8,2	8,1
6221 - Smartiz® Deep magenta silverleaf exp.	7,5	-

3. TOP 10 of varieties on catalog tested more than 4 times over the last 4 years

1	3107 - Tianis® Deep magenta	8,5
2	4062 - Metis® Light pink with eye	8,3
3	3010 - Tianis® Bright red	8,3
4	4011 - Metis® Scarlet compact	8,2
5	4072 - Metis® Rose shades	8,1
6	4210 - Metis® Scarlet red silverleaf	8,0
7	4701 - Metis® VICTORIA	8,0
8	3040 - Tianis® Salmon with eye	8,0
9	5071 - Midi+® Deep rose	8,0
10	3129 - Tianis® White	8,0

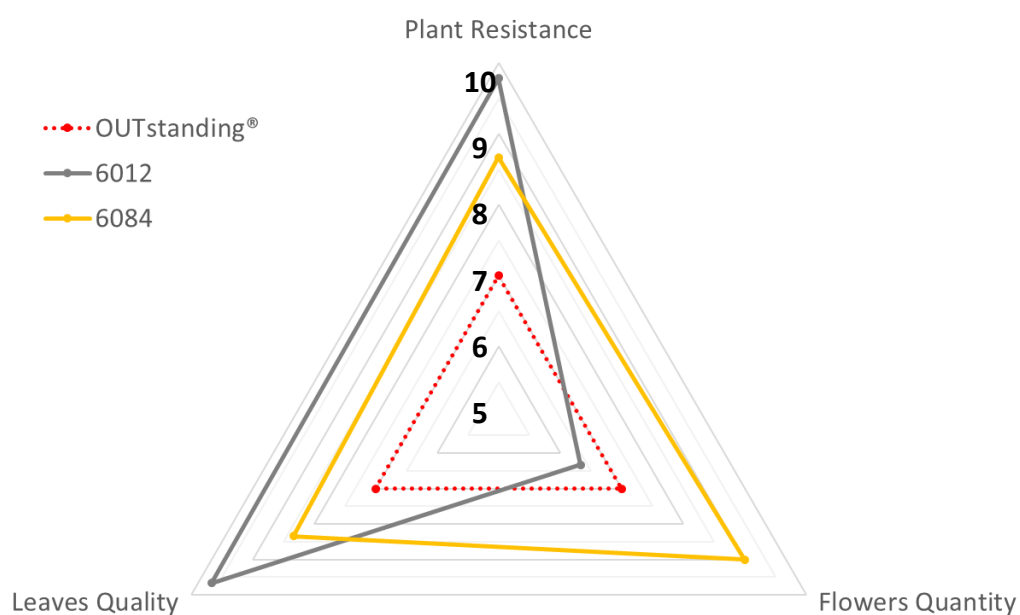
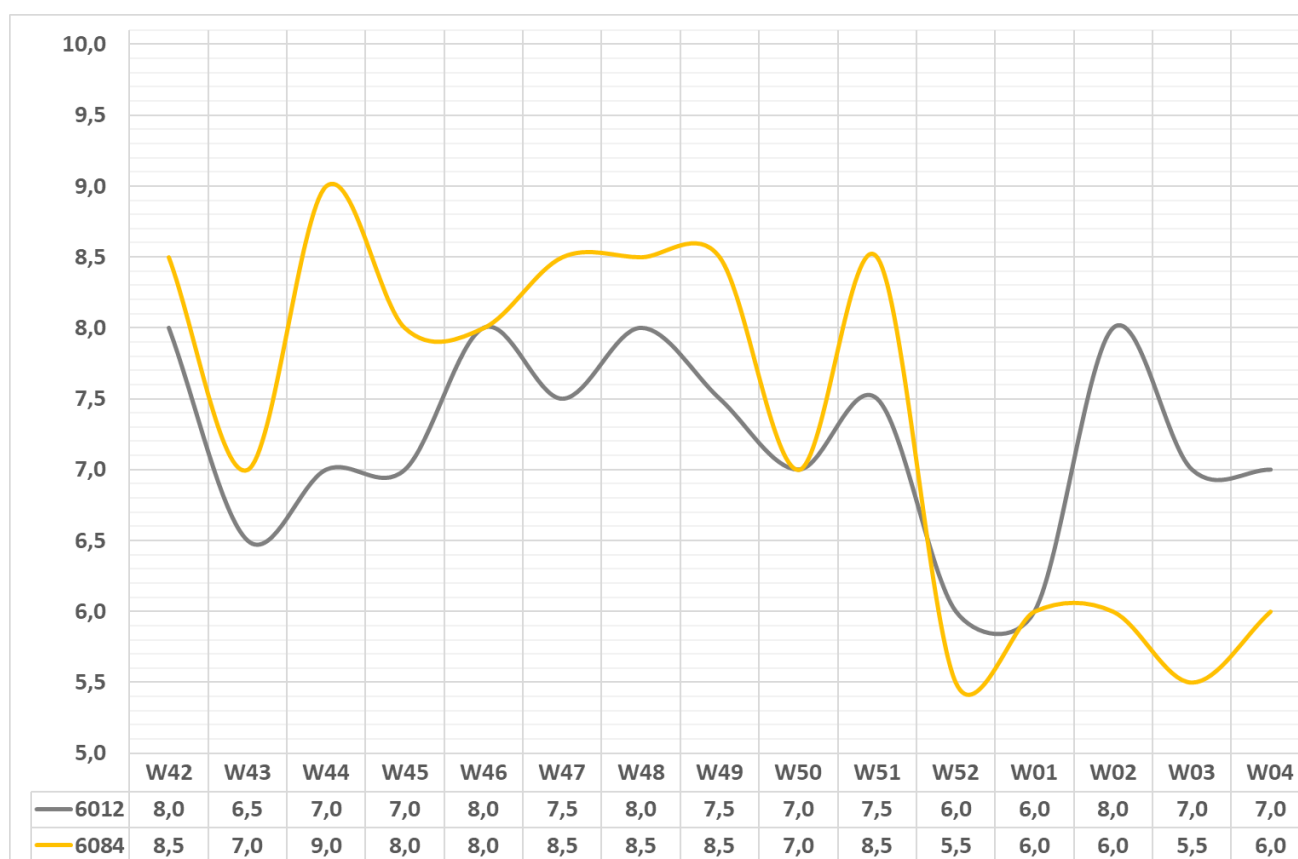
4. Chart of all tested varieties performances



B. Weekly ratings and photographic benchmark of newly validated varieties

1. 6084 Smartiz® Rose Bengal exp.

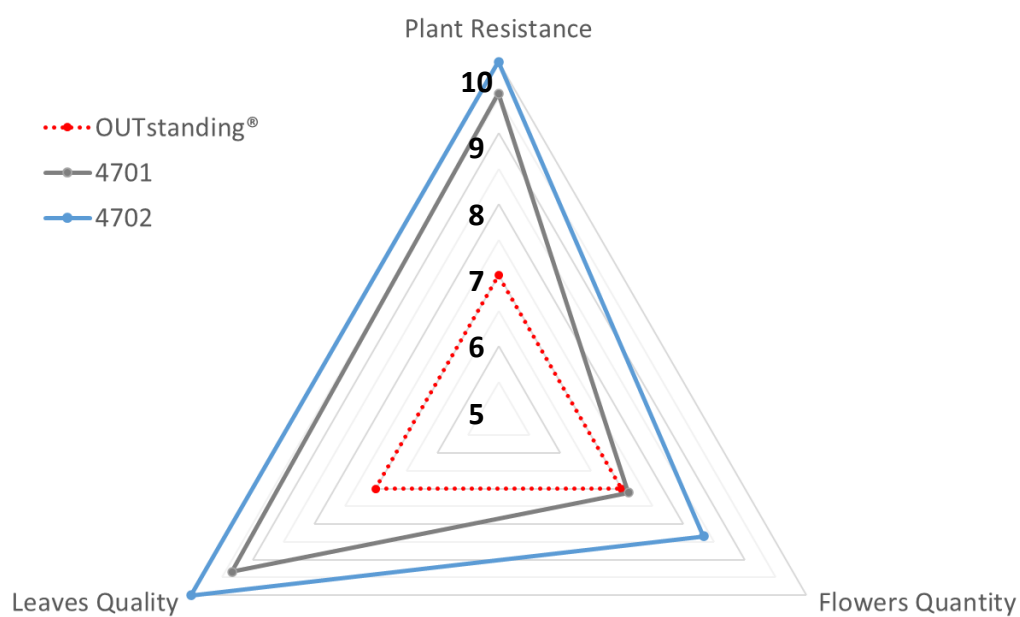
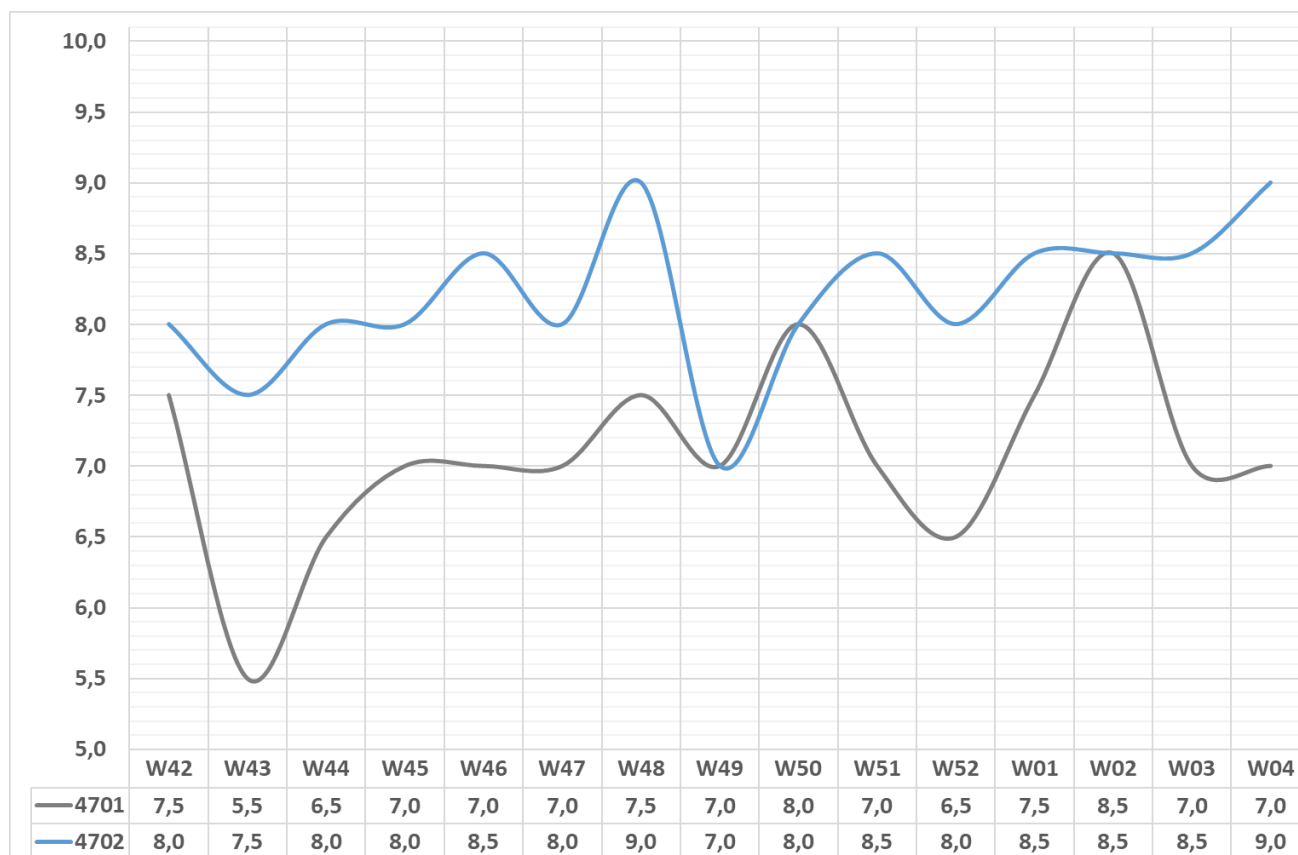
- 6084 Smartiz® Rose Bengal exp. (« DBL » trial Avg = 7.4)
- 6012 Smartiz® Bright red (« DBL » trial Avg = 7.2)



6084 Smartiz® Rose Bengal exp.	6012 Smartiz® Bright red
W46 (2021-11-18)	W46 (2021-11-18)
	
W49 (2021-12-10)	W49 (2021-12-10)
	
W52 (2021-12-30)	W52 (2021-12-30)
	
W03 (2022-01-21)	W03 (2022-01-21)
	

2. 4702 Metis® ABSOLU® de Morel exp.

- 4702 Metis® ABSOLU® de Morel exp. (« DBL » trial Avg = 8.2)
- 4701 Metis® VICTORIA (« DBL » trial Avg = 7,1)



4702 Metis® ABSOLU® de Morel exp.	4701 Metis® VICTORIA
W46 (2021-11-18)	W46 (2021-11-18)
	
W49 (2021-12-10)	W49 (2021-12-10)
	
W52 (2021-12-30)	W52 (2021-12-30)
	
W03 (2022-01-21)	W03 (2022-01-21)
	

VIII. Conclusion

This season, 3 varieties with the status of pre-introduction have satisfied the criteria of the rating system, evaluating outdoor performance, number of flowers as well as overall appearance. 1 variety in Metis® range and 2 varieties in Smartiz® range.

Among them, the following 2 varieties will be newly introduced to catalog for the season 2022-23, and labeled OUTstanding Cyclamen®.

- **6084 Smartiz® Rose Bengal exp.**
- **4702 Metis® ABSOLU® de Morel exp.**

The third variety (6221 Smartiz® Deep magenta silverleaf exp.) will remain pre-introduction one more season.

The 2021 season was extremely dry with a total rainfall of 166mm over the 15 weeks of trial duration, and with no week cumulating more than 50mm of rainfall. This is by far the driest season since 2016. Temperatures stayed under the averages of 6 previous years, except for weeks 45 and 52 for which sudden rising of temperatures have been recorded.

This year trials have shown much less flower than usual, particularly on the best performing weeks and for the best performing varieties. Notably very robust and proven OUTstanding® labelled varieties, tested several times have been underperforming. This may be explained by the dry climate that has been more favorable to the activity of bumblebees until late in the season. According to the evolution of weekly ratings, sudden rises of temperatures combined with dry conditions have also had a negative impact on plants and flowers resistance. A difficulty of rewetting the substrate could also have influenced significantly the global results of trials.

Given the global conditions of 2021's trials, it is necessary to retest some experimental varieties that have not shown satisfactory results.



Shot on 2021-11-18